

## REMARKS

Claims 1 - 16 remain in the application, claims 12-16 are withdrawn from consideration. Claims 1 and 8 have been amended. Claims 1-11 have been rejected. Applicants respectfully request allowance of each of pending claims 1 - 11.

### The Rejections under 35 U.S.C. §103

Claims 1-11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent Application Publication No. US 2002/0140016 to Cha (hereinafter referred to as "Cha") in view of its background. Applicants respectfully traverse the Examiner's position for the following reasons.

The Examiner bears the initial burden to establish a *prima facie* case of obviousness. As it is understood, the references must teach each and all elements of the claimed invention. When evaluating a claim for determining obviousness, all limitations of the claim must be evaluated. If the examiner does not produce a *prima facie* case, applicants are under no obligation to submit evidence of non-obviousness.

Regarding the amended independent claim 1, Cha does not teach a magnetic memory device that comprises a horizontal structure device formed on a substrate. The amended claim 1 includes a horizontal structure device formed on a semiconductor substrate, as shown in FIGs. 3a - 3e. However, Cha is directed to a specific kind transistor that vertically erects from a substrate, which is referred to as a vertical structure transistor (see FIG. 2A).

Cha is an improper prior art to rely on for rejecting the claim 1. Cha, in fact, teaches away from a magnetic memory device that comprises a horizontal structure

device. In the background of the invention, Cha alleges that a horizontal structure transistor would cause an undesired surface roughness on the lower part of a magnetic memory device, and proposes to solve this undesired condition by implementing a vertical transistor (see paragraph [0014] and FIG. 2A). As such, the teaching of Cha is incompatible with the horizontal structure device as disclosed in claim 1 of the invention.

Regarding the amended independent claim 8, Cha does not teach a magnetic memory device that comprises a horizontal structure transistor. For the same reasons discussed above, Cha should not be relied on for supporting the rejection.

In addition, the claim 8 particularly includes a horizontal structure transistor formed on a substrate having a substantially flat top surface. Cha does not teach such limitation. According to Cha, the semiconductor substrate 111 is etched to form a circular pillar 112 for formation of a drain 117, channel region 115 and source 113 (see FIG. 2A and paragraph [0029]). As a result, the part of the semiconductor substrate 111 that constitutes the circular pillar 112 is substantially elevated from the other parts, and the top surface of the semiconductor substrate 111 is not flat.

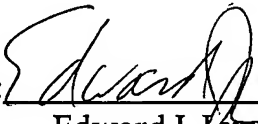
The remaining dependent claims further limit their respective independent claims in a patentable sense, are therefore also deemed to be in a condition for allowance.

## CONCLUSION

Applicants have made an earnest attempt to place this application in an allowable form. In view of the foregoing remarks, it is respectfully submitted that the pending claims are drawn to novel subject matter, patentably distinguishable over the prior art of record. The Examiner is therefore, respectfully requested to reconsider and withdraw the outstanding rejections.

Should the Examiner deem that any further clarification is desirable, the Examiner is invited to telephone the undersigned at the below listed telephone number.

Respectfully submitted,

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